

REMARKS/ARGUMENTS

New claims 14 to 17 further define the viscosity of the hydrocarbon oil; see page 4, lines 14 to 19 for support.

Regarding XP-002180876, the information requested in the Office Action of March 9, 2005 is not known or readily available to Applicants at this time.

Pursuant to the last Office Action, claims 1, 7 and 13 were rejected under 35 U.S.C. 103(a) as unpatentable over:

EP 0 546 235 ("EP '235") by itself,
EP '235 in view of U.S. 5,999,570 ("Pavlin") in further view of U.S. 5,116,607 ("Jones"), and
DE 1035855 optionally in view of Pavlin.

In view of the remarks that follow, reconsideration and allowance of the subject claims, as hereby amended, is respectfully requested.

As noted in the Amendment dated November 18, 2004, the subject invention is directed to a method for conditioning hair by treating the hair with a blend of specified amounts of two different types of oily components, i.e., a glyceride fatty ester and a second oily component which is one or more hydrocarbon oils having a viscosity at 25 to 30°C of from 0.0001 to 0.5 Pa.s (claims 1, 7 and 13), from 0.001 to 0.05 Pa.s. (claims 14 and 15) or from 0.001 to 0.02 Pa.s. (claims 16 and 17). In the case of claims 1, 7, 14 and 16, the first oily component is selected from the group consisting of

coconut oil, sunflower oil, almond oil , and mixtures thereof, and the second oily component is light mineral oil.

In contrast, EP '235 is directed to a method of treating the scalp to stimulate hair re-growth, using a composition comprising a mixture of at least three vegetable oils or fats with greatly differing saponification and iodine numbers, namely, castor oil, almond oil and olive oil. EP '235 does provide for the presence of coconut oil as an additional vegetable oil. As to the levels at which the vegetable oil is present, the patent states:

If, as is preferably provided by the invention, the vegetable oils are present in the mixture in equal proportions, their characteristics come to maximally balanced effect and give optimum results for the types of oil used.

Regarding the presence of additional substances the patent notes:

Finally, additional substances can also be added to the mixture of vegetable oils described above. These are preferably glycerol (propanetriol) and paraffin oil (vaseline oil, liquid paraffin). These two substances can each be added alone, but preferably they are both present in the preferred variant of the hair restorer of the invention. Due to its hygroscopic nature glycerol acts as a humectant, and paraffin oil is used to dilute the active substances contained in the vegetable oils.¹

In the single Example provided by the patent, a mixture of 1/6 parts by volume each of castor oil, sweet almond oil, olive oil, coconut oil, glycerol (i.e., glycerine) and paraffin is described. Thus, castor oil, olive oil and glycerol constitute 50% by volume of the mixture collectively, with the combination of sweet almond oil and coconut oil constituting 33.3 % by volume of the mixture, and paraffin constituting 16.7% by volume of the mixture.

¹ All quotations from EP' '235 are taken from the English translation of record.

If the glycerol component is eliminated from the EP '235 Example as the recent Office Action suggests, and the oils are mixed in equal proportions, the combined amount of almond oil and coconut oil in the composition is 40% by volume. In contrast, the hair oils described by claims 1, 7, 14 and 16 of the subject application comprise 60% to 80% by weight of a first oily component selected from the group consisting of coconut oil, sunflower oil, almond oil and mixtures thereof. Accordingly it is respectfully submitted EP '235 does not disclose or suggest the amounts of coconut, sunflower and/or almond oil required by these claims.

For the reasons of record, Applicants respectfully submit that the limited disclosure of "paraffin oil" set forth in EP '235 does not motivate the selection of a low viscosity second oily component as described by the subject claims, as a means of improving the sensory and fiber penetrating properties of hair oils comprising a glyceride fatty ester. In the Office Action it is argued that Grant & Hackh's Chemical Dictionary, Fifth Edition, 1987, describes paraffin oil as having a carbon length of C10 to C18, from which it is argued that EP '235 implicitly teaches light mineral oil.² Hydrocarbon oils are typically comprised of hydrocarbons selected from cyclic as well as saturated and unsaturated straight- or branched-chain hydrocarbons. Typically the oils exist as mixtures. As is well known to those skilled in the art, the viscosity of such oils depends, in part, on the particular combination of hydrocarbons present, and the molecular weights and relative amounts thereof. It does not follow that the selection of oils meeting the viscosity requirements of the subject claims is inherently taught by the limited disclosure of EP '235.

² Applicants note that the latest citation from the referenced dictionary was not included with the last Office Action. For record purposes, it is respectfully requested that the Examiner submit a copy of same with the next Action.

In the discussion of EP '235, the Action refers to U.S. 4,904,471 as disclosing that light mineral oil "is conventionally used in hair treatments but is not absorbed easily into the hair or skin and tends to sit on the surface of the skin, leaving a greasy feel. Thus, without evidence comparing light versus heavy mineral oil, arguments and assertions of unexpectedness cannot overcome an obviousness rejection." In actuality, the '471 patent states:

Generally, light mineral oil is being used for topical treatment of hair and skin. However, light mineral oil is not absorbed readily by either the skin, hair follicles or hair shafts. Rather, light mineral oil tends to remain on the surface and simply creates a greasy film. Since light mineral oil does not penetrate surface areas of hair and skin, light mineral oil does not treat these areas by entering the interstices between the deceased cells which form hair and the outer layer of the epidermis. Accordingly, light mineral oil does not adequately provide subsurface lubrication so as to replace natural oils in the skin, scalp and hair and to thereby promote control of dryness in the skin and scalp, control of split ends in hair shafts and promote the general health of one's scalp which leads to the healthy growth of hair.

Many hair preparations are in essence grease with mixtures of chemical synthetics that weigh down hair shafts and cause the shafts to temporarily adhere to one another resulting in limp, obviously greasy hair that is considered just generally unattractive by most people.

The patent goes on to disclose compositions that comprise heavy mineral oil, natural extract oil of burdock root and herbal fragrance, the heavy mineral oil comprising at least 90% by volume of the preparation.

At page 8 of the subject application Applicants provide data showing that a hair oil comprising 100% coconut oil (control) was less penetrating to hair fiber than a composition comprising 60% coconut oil, 5% sunflower oil and 35% light mineral oil. The data being characterized as showing that "mixing light hydrocarbon oil to the hair oils improves significantly the total oil penetration into the hair fibre." There is nothing in

the '471 patent that discloses or suggests that this would be the case. If anything the '471 patent teaches away from the use of light mineral oil as being non-penetrating.³

The '471 patent does nothing to cure the deficiencies of EP '235 with respect to its failure to disclose the use hydrocarbon oils meeting the viscosity requirements of the subject claims. Moreover, there is nothing in EP '235 that discloses or suggests the use of the low viscosity hydrocarbon oils described by the subject claims as a means of reducing the greasy feel and improving the hair penetrating ability of hair oils comprising a first oily component as described by the subject claims.

Pavlin is directed to gelling agents for low polarity liquids, such gelling agents being ester-terminated polyamides. The patent also discloses gels formed between the described ester-terminated polyamide and a nonaqueous liquid, preferably a low-polarity liquid, with the preferred low polarity liquid being solvents and oils. There is nothing in Pavlin that discloses or suggests hair oils having 60-80% of a first oily phase as described by the subject claims. Pavlin's disclosure of light mineral oils as being among the mineral oils that may be used to form its gels does nothing to cure the deficiencies of EP '235, indeed, the very combination with EP '235 is mere hindsight suggested only by the subject application. Further, even if combined, the combination fails to disclose the subject compositions.

Jones discloses a hair treatment cream comprising petrolatum (light), polyethylene glycol (PEG), PEG-75 (a water soluble lanolin that is 50% aqueous), castor oil microcrystalline wax, paraffin wax, biotin, keratin, placenta, and polysorbate 80. The disclosed composition (which includes coconut and almond oil among its

³Compared to the 100% coconut oil control, Example 3 also had a less greasy feel. See the data at page 8 of the subject application.

numerous components) contains significantly less than the 60-80% by weight of a first oily component required as required by the subject claims. As with Jones, its combination with EP '235 is mere hindsight suggested only by this invention. Even if combined, the resulting combination fails to disclose compositions as set forth in the amended claims.

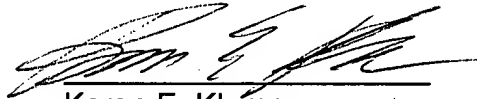
DE is characterized in the March 9, 2005 Office Action as containing 50% olive oil, 40% paraffin oil, 9% isopropylmyristate 0.5% N-acetylcysteine isopropyl ester, and 0.5% N-salicylic methionine isopropylester, with the acknowledgement that "DE does not teach the instant 60% of a first oily component as described by the subject invention or the viscosity of the paraffin oil. The citation does not cure the deficiencies of Pavlin discussed above, nor does its combination with Pavlin disclose or render obvious the subject invention.

To summarize, it is respectfully submitted that the invention as described by the subject claims is neither disclosed nor rendered obvious by (a) EP '025, alone or in combination with Pavlin in further view of Jones EP '025 or (b) DE 1035855 optionally in view of Pavlin.

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Accordingly, reconsideration and allowance of the claims as hereby amended, is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Karen E. Klumas', is written over a horizontal line.

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